

COUNTRY : USSR
CATEGORY :

M-4

ABS. JOUR. : RZBiol., No. 19, 1958, No. 87039

AUTHOR : Yakushevskiy, Ye. S.
INST. : All-Union Institute of Plant Breeding
TITLE : VIR Selection of Varieties of Grain- and
Sugar Sorghum.

ORIG. PUB. : Byul. Vses. in-ta rasteniyevodstva, 1957,
No 3, 25-31

ABSTRACT : The worldwide sorghum acreage is of about 40 million hectares. In a number of southern and southeastern districts of USSR sorghum is the highest-yield annual feed crop. The Institute of Plant Breeding has a large collection of specimens of sorghum varieties of worldwide origin. Since 1933-1934 the Institute had initiated selection work on this crop at the Kuban station. At the present time 10 varieties of grain- and sugar sorghum, developed by VIR, have been earmarked for cultivation within specific areas: Gaolyan karlikovyy 1418, Gaolyan korichnevyy 212, Disugara karlikovaya 185, Kubanskoye krasnoye 1677, Kubanskoye krasnoye (grain sorghum), Oranzhevoye 650,

CARD://

YAKUSHIN, A.

Use of local materials lowered building costs. Sel'.stroitel' no.3:
7-8 Mr '56. (MIRA 9:7)

1. Starshiy inzhener Krasnoyarskogo krayevogo upravleniya po stroitel'-
stvu v kolkhozakh.
(Building materials)

YAKUSHIN, A., inzhener.

Laying stone walls with the help of a movable form. Sel'stroi.
ll no.6:15-17 Je '56. (MIRA 9:9)

1. Krasnoyarskoye krayevoye upravleniye po stroitel'stvu v kol'-
khozakh.

(Masonry)

ACC NR: AP6035838

(A)

SOURCE CODE: UR/0413/66/000/020/0042/0042

INVENTOR: Kogan, P. A.; Nikulin, V. K.; Yakushin, A. N.

ORG: None

TITLE: Turbofan assembly with grease-packed bearings. Class 17, No. 187045

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 42

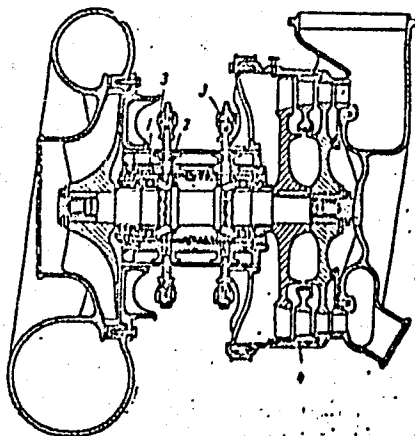
TOPIC TAGS: antifriction bearing, industrial blower, grease, turbine

ABSTRACT: This Author's Certificate introduces: 1. A turbofan assembly with grease-packed bearings. The unit consists of a two-stage turbine mounted on a common shaft with a blower impeller. The weight and overall dimensions of the installation are reduced while simultaneously increasing the rotational velocity by using grease-packed antifriction bearings with the inner protective ring removed. The bearings have auxiliary lubrication make-up cavities in the housing and cups for adding grease. A water heat exchanger is built into the housing of the bearings. 2. A modification of this assembly in which remanent disbalance (radial dynamic loading) is reduced by using a one-piece housing for the two-stage turbine with a suspended diaphragm between the turbine discs.

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UDC: 621.572/576 629.13.01/06

ACC NR: AP6035838



1—bearings; 2—make-up cavities; 3—grease cups; 4—turbine

SUB CODE: 13/ SUBM DATE: 17Jul62

Card 2/2

L 62252-65 EWT(d)/EWT(1)/EWT(m)/EWP(v)/EWP(k)/EWP(h)/EWP(j)
ACCESSION NR: APS021627

AUTHOR: Kogan, P. A.; Yakushin, A. N.

TITLE: Magnetolectric contactless speed governor. Class No. No. 12620

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 160

TOPIC TAGS: electric speed governor, turbomachine

ABSTRACT: An Author Certificate has been issued for an improved contactless magneto-electric speed governor for turbomachines described in Author Certificate No. 157886. To make the damping of the movable unit of the governor more stable, the magnetic circuit of the assembly is formed by evenly distributed grooves along its circumference. (PS)

ASSOCIATION: Organizatsiya gosudarstvennoy zashchity nauchnykh i tekhnicheskikh izobreteniy

SUBMITTED: 25Jan65

ENCL: 00

SUB CODE:PR,IE

NO REF SOV: 000

OTHER: 000

ATD PRESS: 4072

ACC NR: AP6035912

SOURCE CODE: UR/0413/66/000/020/0158/0158

INVENTOR: Kogan, P. A.; Yakushin, A. N.

ORG: none

TITLE: Absolute-pressure regulator for a sealed aircraft cabin. Class 42,
No. 187420

SOURCE: Izobreteniya, promyshlennyye obraztsey, tovarnyye znaki, no. 20, 1966, 158

TOPIC TAGS: pressure compensator, pressure measurement, pressure regulation,
pressure regulator, aircraft pressurization, *aircraft cabin equipment*

ABSTRACT: An Author Certificate has been issued for an absolute-pressure regulator for a sealed aircraft cabin, which contains pressure-drop and speed-of-change pickups (consistings of membranes with rigid centers connected valves for controlling the escape of air to the atmosphere) and an absolute-pressure pickup. To increase regulator reliability and simplify its design, the absolute-pressure pickup is in the form of a spring-supported membrane; to one side is fed the pressure being measured, and to the other side a proportional pressure; this is measured from the minimal cross section of a jet nozzle made in the form of a critical Venturi pipe and connected to an ejector suction line. Orig. art. has: 1 figure. [WA-98]

SUB CODE: 01, 14/ SUBM DATE: 06Feb65

Card 1/1

UDC: 621-531 629-13,01

18(5,7)

SOV/135-59-8-4/24

AUTHORS:

Prokhorov, N.N., Doctor of Technical Sciences, Makarov, E.L., Engineer, and Yakushin, B.F., Engineer

TITLE:

Strength of Steel in the Process of Austenite Transformation During Welding

PERIODICAL:

Svarochnoye proizvodstvo, 1959, Nr 8, pp 12-15 (USSR)

ABSTRACT:

Metallographic examinations of the cold cracks in the zone thermic effect in joints of low-alloy steels show, that the cracks are brittle and are mostly found at the periphery of the initial austenite cores. Figure 1 shows a microphoto of a typical crack in the zone near a welding seam of low-alloy steel. It can be seen that the crack goes along the edge of the cores and only in some cases cuts through the core. Figure 2 shows a cold crack of short length, which was found in the zone of thermic influence on a sample of low-alloy steel, which had been tested in regard to its tendency to form cracks. This microphoto clearly shows the inter-crystalline character of the cold cracks. An analysis of the damages in the formation

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of cold cracks thus permits the assumption, that cold cracks are formed on the edges of the cores. In the literature this assumption is confirmed. Consequently a kinetic analysis of the mechanical qualities in the disintegration process of the austenite, taking in regard certain conditions causing the inter-crystalline destruction of the steels, must be the basis for an estimation of the tendency of steels to form cold cracks. If the timing conditions are neglected in the tests, the character of the destruction is changed, i.e. the inter-crystalline destruction is replaced by the inner-crystalline one. The results obtained in such tests cannot be used to estimate the tendency of the steels to form cold cracks during the welding. There is no agreement between the mechanical characteristics of the steel under the conditions in the zone of thermic influence of the welding seam and the tendency of these steels to form cold cracks during the welding. In tests with constant loads, however, a certain agreement between these characteristics was

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obtained. In these tests the steel decayed because of brittleness, which was partly inter-crystalline and partly inner-crystalline, under loads which were considerably below the breaking strength. The destruction of the steel in this case was similar to that, which was observed as a cause of the formation of cold cracks in the zone of the thermal influence of the welding. The study which is here presented gives the results of mechanical tests of steels, which were heat-treated in the welding cycle under different speeds of deformation. For the tests a machine was constructed which differs from the common types by that its motion speed for the moveable arms was changed in the limits of $22 - 0.00015 \text{ mm/s}$. The machine consists of the following main parts: the system to heat the sample in the given time by exposing it to an electric current; the mechanical gear; and the mechanism to register the strength and the elongation of the part during the destruction. The scheme of the machine is given in figure 3. In the following

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part the machine is described in detail. The diagram "force-deformation" is written on a sheet of paper which is fixed on a drum. The methods of the examinations were developed in the welding laboratory of the MVTU and are perfected in this study. The tests were carried out with flats of 3x15x135 mm with a circular turned hole in the center. The tests were characterized by a heating up to 1300 °C at 8-10 deg. and a medium cooling speed of 5, 20, and 200 °C/sec at 500 °C. The deformation strength was determined by the bending power of the dynamometric spring. After the destruction the durability limits and the cross contraction were determined. The thermic welding cycle in testing the formation of cracks was selected similarly to that in the tests of the mechanical characteristics. As the data show that the durability changes under retarded destruction just as the resistability of steels against the formation of cold cracks in the welding. Analyzing the inter-crystalline

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destructions of the metal it must by all means be considered that it is caused by certain conditions of temperature and time of the load and the structure of the metal. The resistability to deformations on the edges of the cores changes with the alterations in the toughness of the inter-crystalline layers and in the deformation speed. In the deformation process of the austenite the inter-crystalline layers are also tough, but the tenacity rises considerably. The mechanical characteristics of steel, which is treated in a thermic welding cycle, can be used for a relative estimation of the strength of the basic metal to resist the formation of cracks in welding. There are 4 photographs, 4 graphs, 2 diagrams and 12 references, 7 of which are Soviet and 5 English.

ASSOCIATION: MVU im. Baumana (Moscow Higher Technical School im. Bauman)

Card 5/5

36075

S/135/62/000/004/008/016
A006/A101

1.7300

AUTHOR: Yakushin, B.F., Engineer

TITLE: On the formation of weld-adjacent hot cracks in welding

PERIODICAL: Svarochnoye proizvodstvo, no. 4, 1962, 21-23

TEXT: The author criticizes the theory on the mechanism of hot crack-formation in the weld-adjacent zone, advanced by N. F. Lashko and S. V. Lashko-Avakyan in reference 1, who believe that crystallization cracks may form during the solid-liquid state of the weld or the base metal. The author, in contradiction to this theory, mentions the fact that the zone where hot cracks may arise in the weld joint, depends on the spot of concentrated elastic-plastic deformations, which is determined by the temperature distribution over the cross section of the weld, and the composition of the weld and the base metal. Moreover, the weld shape has an effect on the location of deformation concentrations in single-pass welding of thin joints. The problem is studied with the use of data on the nature of changes in metal strength in the brittle temperature range. The statement that alloys with high percentage of alloying are sensitive to weld-adjacent hot cracks is rejected, and the author asserts that crack formation

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S/135/62/000/004/008/016
A006/A101

On the formation of weld-adjacent ...

depends on the deformation-resistance ratio of the weld and the weld-adjacent zone. In this case, linear energy, the filler material and reinforcement of the weld, are of considerable importance. The method employed at MVTU to determine metal resistance against hot cracks during welding is based on the comparison of the metal ductility in the temperature range of crack formation, with deformations. It can also be used to evaluate the proneness to weld-adjacent cracks. Strength and ductility of the weld and base metal, and consequently, all aggregation and structural factors, connected with the crystallization process, are taken into account. The investigations, performed with aluminum and magnesium alloys, 1 - 20 mm thick, show that weld-adjacent hot crack formation is predetermined by deformation concentrations in this zone during cooling of the joint within the brittle temperature range. Hot cracks will arise if the rate of increase of elastic-plastic deformations in this zone will exceed the ultimate deformation rate of the metal within the brittle temperature range. There are 4 figures and 4 Soviet-bloc references.

ASSOCIATION: MVTU imeni Bauman

Card 2/2

36076

S/135/62/000/004/009/016

A006/A101

18.1710

AUTHORS:

Yakushina, G. M., Engineer, Meshkova, O. V., Candidate of Technical Sciences. Yakushin, B. F., Engineer

TITLE:

Comparison of some methods for evaluating the technological strength of aluminum alloys in welding

PERIODICAL: Svarochnoye proizvodstvo, no. 4, 1962, 23-26

TEXT:

The authors compared results from evaluating the resistance of aluminum alloys to hot crack formation during welding. The results were obtained with the aid of various test methods. The tests were made with alloys whose crack sensitivity in welding was known from their use in welded structures. The investigations were carried out for the purpose of selecting the best test methods. The tests were made with three technological samples (cross-shaped, fishbone and round specimens) and with the use of the MVTU method, when the specimens are welded at $q/v = \text{constant}$ and the specimen is stretched during crystallization perpendicularly to the seam axis at different rates. It was found that round specimens were suitable for the qualitative evaluation of hot crack resistance in the welding of alloys. For the quantitative evaluation the

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Comparison of some methods ...

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MVTU method should be employed. To determine the proneness of alloy to the development of cracks, the cross-shaped and fishbone specimens can be used. However, the cross-shaped specimen yields a greater straggling of test results than the fishbone specimen and the welding process is hard to automate when using this type of sample. High metal consumption is another deficiency of cross-shaped specimens. The fishbone specimen is free of these defects and is more reliable in evaluating the proneness of the base and filler metals to the development of hot cracks in welding. There are 4 figures and 8 references: 5 Soviet-bloc and 3 non-Soviet-bloc.

X

Card 2/2

1.2200

41865
S/549/62/000/106/004/010
1003/1203

AUTHORS: Prokhorov, N.M., Doctor of Technical Sciences, Professor, Gavriluk, V.S., *Ingenieur*; and Yakushin, B.F., *Ingenieur*

TITLE: Universal testing machine $\Sigma T \Pi - 1 - 4$ (LTP-1-4) for determining the resistance of welds to hot cracking

SOURCE: Moscow. Vysshoye tekhnicheskoye uchilishche. [Trudy] no. 106, 1962. 114-122. Svarka tsvetnykh splavov i nekotorykh legirovannykh staley

TEXT: The main draw-back of testing machines in use at present is the discrepancy between the conditions under which the deposited metal solidifies during service and those during testing. The excellent performances claimed for this machine permit the obtaining of welding conditions comparable with practical ones. The machine consists of the following essential elements: 1. a device for stressing the sample; 2. a welding device; 3. devices for recording the testing conditions. A comparison of the data obtained by this method (called MBTU (MVTU)) with those obtained by testing samples welded under industrial conditions showed a satisfactory agreement and the authors therefore recommend the use of this machine in all industrial and scientific laboratories. There are 7 figures.

Card 1/1

1.2300

41867
S/549/62/000/106/007/010
1003/1203

AUTHOR: Yakushin, B.F., *Ingenieur*

TITLE: Investigation of the resistance of aluminum alloys to hot-cracking during welding

SOURCE: Moscow. Vysshoye tekhnicheskoye uchilishche. [Trudy] no. 106, 1962. 157-165. Svarka tsvetnykh splavov i nekotorykh legirovannykh staley

TEXT: Because of the shortcomings of the known investigation methods a new testing machine was introduced for determining the resistance of thin aluminum sheets (2-4 mm) to hot-cracking. The machine consists of an automatic welding device and a stretching device. An investigation was made of the influence of the chemical composition of the weld beads, of the alloys to be welded and of the electrodes on the resistance of welds to hot-cracking and suggestions were made for improving this resistance. The machine is recommended for use in laboratories and in plants dealing with the above problem. There are 9 figures.

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DOC ID: A66000000 (N) SOURCE CODE: 00/0000/00/000/000/0000/0000

AUTHORS: Yakovlev, B. P. (Engineer); Prokhorov, N. H. (Doctor of technical sciences);
Rosenkrantz, T. A. (Engineer)

ORG: none

TITLE: The effect of the rate of deformation on the mechanical properties of the
zone of steel 1Kh18N9T near the seam

SOURCE: Moscow. Vyssheye tekhnicheskoye uchilishche. Prochnost' svarnykh konstruktsiy
(Strength of welded structures). Moscow, Izd-vo Mashinostroyeniya, 1966, 216-226

TOPIC TAGS: welding, metal deformation, welding technology, weld effect, weld
evaluation, steel/ 1Kh18N9T steel

ABSTRACT: Experimental work was performed for the purpose of duplicating brittle
failures in austenite steels at high temperatures. The experiments were aimed at
finding methods for qualitative analysis of the tendencies of alloys toward localized
failure. Specifically sought was the reaction of the process of failure on the
variation of the rate of deformation in a wide range and with temperatures ranging
from 500--650C. A description of the experimental methods, specimens and sizes, etc,
is given. The variation of the strength limit and
absolute elongation with various tensile strain and for various material and
temperature combinations; variation of the strength limit of nonuniform specimens

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L 10281-67

ACC NR: AT6030945

exposed to different types of welding. Photographs of fractured specimens are shown. The authors note that at relatively high rates of deformation the entire section in the macroscale undergoes a failure. At low rates of deformation the failure of the specimen was more localized and was manifested as cracks propagating at low strength and plasticity. The effect of preheating is minor with higher rates of deformation, but is increasingly important with reduced rates of deformation. Various effects of the type of welding are discussed. Orig. art. has: 9 figures.

SUB CODE: 11, 13/ SUBM DATE: 11Mar66/ ORIG REF: 003/ OTH REF: 001

Card 2/2

ACC NR: AV6032029

SOURCE CODE: UR/0000/00/000/000/0220/0230

AUTHOR: Yakushin, B. F. (Engineer)

ORG: none

TITLE: Effect of welding parameters on the technological strength of aluminum alloys during solidification

SOURCE: Moscow. Vyssheye tekhnicheskoye uchilishche. Avtomatizatsiya, mekhanizatsiya i tekhnologiya protsessov svarki (Automation, mechanization and technology of welding processes) Moscow, Izd-vo Mashinostroyeniye, 1966, 220-230

TOPIC TAGS: aluminum alloy, aluminum alloy ~~property~~, ~~weld hot cracking susceptibility~~, weld solidification, weld strength, ~~hot cracking susceptibility evaluation~~ *crack propagation, welding technology, weld evaluation, weld defect*

ABSTRACT: A method of quantitative determination of the technological strength (resistance to hot cracking) index for aluminum-alloy welds has been developed. The method is based on straining a number of welds at various speeds during solidification. The critical deformation speed at which hot cracks appear in the weld metal is taken as an index of the weld technological strength. The index is exposed: $a_{cr} = a_p - a_w$, where a_p is the highest deformation rate below which no hot cracking occurs, and a_w is the deformation rate caused by the weld shrinkage and by decreasing distance between the clamps of the testing machine holders. The index does not depend on the

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ACC NR: AT6032629

time the metal is in the NDT range and has been successfully used for determining the optimum welding speed for several aluminum alloys. Orig. art. has: 13 figures and 6 formulas.

SUB CODE: 13// SUBM DATE: 14May66/ ORIG REF: 007

Card 2/2

YAKUSHIN, B.V.

Problems in algorithmically compiled subject indexes; a brief survey
of foreign literature. NTI no.5:22-25 '65. (MIRA 18:7)

LISTOV, Aleksandr Fedorovich, prof.; YAKUSHIN, B.V., red.; KOZLOVSKAYA,
M.D., tek.m.red.

[Hygiene of school-age children and the prevention of infections
and helminthiasis; manual for teachers and school physicians]
Gigiena detei shkol'nogo vozrasta i profilaktika infektsii i
gel'mintozov; posobie dlia uchitelei i shkol'nykh vrachei. Izd.3.,
dop. Moskva, Gos.uchebno-pedagog.izd-vo M-va prosv.RSFSR, 1959.
335 p. (MIRA 13:7)

(CHILDREN--CARE AND HYGIENE)

(CHILDREN--DISEASES)

IGNAT'YEV, Yevgeniy Ivanovich, red.; YAKUSHIN, B.V., red.; KOVALENKO,
V.L., tekhn.red.

[Psychology of personality] Voprosy psikhologii lichnosti;
sbornik statei. Pod red. E.I. Ignat'eva. Moskva, Gos. uchebno-
pedagog. izd-vo M-va prosv. RSFSR, 1960. 212 p. (MIRA 14:2)

(Psychology)

(Child study)

YAKUSHIN, B.V.

Algorithmic method of extracting subject concepts for the
compilation of indexes (the called pairs method). NTI no.
7:12-20 '63. (MIRA 16:11)

YAKUSHIN, B.V.

"Constitution" of subphrases as an algorithmic method of isolating
from a text the subject ideas for an index. NTI no.8:14-19 '64.
(MIRA 17:12)

5.4300

88357
S/195/60/001/004/001/015
B017/B055

AUTHORS: Yakushin, F. S., Shatenshteyn, A. I.

TITLE: Kinetic Isotope Effect in Deuterium and Tritium Exchange in Liquid Ammonia

PERIODICAL: Kinetika i kataliz, 1960, Vol. 1, No. 4, pp. 489-495

TEXT: The kinetics of the isotopic exchange of deuterium and tritium in fluorene and methyl- β -naphthyl ketone in liquid ammonia at 25°C was investigated. Deuterium exchange was found to be twice as rapid as that of tritium. Data on activity measurements of the water obtained by combustion of the samples are shown in Table 1. The accuracy of determination was 2-3%. The investigations of the kinetics of isotopic exchange are described in Tables 2-5. A comparison of the results with those obtained at metalization of organic substances by means of organoalkali compounds showed that both reactions obey the same laws. The occurrence of a positive kinetic isotope effect confirms that the reaction rate is limited by the scission rate of the C-H bond. The kinetic isotope effects of hydrogen exchange with bases and with acids are of the same magnitude but

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Kinetic Isotope Effect in Deuterium and
Tritium Exchange in Liquid Ammonia

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S/195/60/001/004/001/015
B017/B055

the exchange mechanisms are different. The results are compared with those of Western researchers. As yet, they do not suffice to explain the reaction mechanism. The Soviet researchers Ye. A. Shilov and F. M. Vaynshteyn are mentioned. There are 3 figures, 5 tables, and 35 references: 18 Soviet, 7 US, 5 British, 1 Danish, 1 German, and 3 Swedish. ✓

ASSOCIATION: Fiziko-khimicheski institut im. L. Ya. Karpova
(Physicochemical Institute imeni L. Ya. Karpov)

SUBMITTED: July 25, 1960

Card 2/2

S/020/61/136/001/034/037
B004/B056

AUTHORS: Mardaleyshvili, R. Ye., Popov, A. G., Nikisha, V. V., and Yakushin, F. S.

TITLE: On Two Types of Elementary Reactions in the Catalytic Hydrogenation of Olefins

PERIODICAL: Doklady Akademii nauk SSSR, 1961, Vol. 136, No. 1, pp. 155-158

TEXT: A paper by N. N. Semenov, V. V. Voyevodskiy, and F. F. Vol'kenshteyn (Ref. 1) gave rise to the present investigation. In the former it was assumed that the free valences upon solid surfaces lead to the formation of so-called surface radicals. These cause heterogeneous catalysis. The authors completed this assumption by assuming formation of two types of radicals: $C_2H_4 + 2cat \rightleftharpoons CH_2-\dot{C}H_2 + cat \rightleftharpoons CH_2-CH_2$ (1);

$CH_2-\dot{C}H_2 + \dot{H} \rightleftharpoons CH_2-CH_3 \rightleftharpoons \dot{C}H_2-CH_3$ (2). The radicals (a) are bound to the catalyst (cat) by two electrons, the radicals (b) by one electron only.

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On Two Types of Elementary Reactions in the
Catalytic Hydrogenation of Olefins

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B004/B056

The latter recombine with hydrogen according to the scheme
 $\text{CH}_2\text{-CH}_3 + \text{H} \xrightarrow{\text{cat}} \text{C}_2\text{H}_6 + 2\text{cat}^* \quad (3)$. However, also disproportionation processes

should occur besides the processes mentioned, if the assumption of surface
radicals is correct: $\text{CH}_2\text{-CH}_2 + \text{CH}_2\text{-CH}_2 \xrightarrow{\text{cat}} \text{CH}_2\text{-CH}_3 + \text{CH=CH}_2 \quad (4)$;

$\text{CH}_2\text{-CH}_3 + \text{CH}_2\text{-CH}_3 \xrightarrow{\text{cat}} \text{CH}_2\text{-CH}_2 + \text{C}_2\text{H}_6 + \text{cat}^* \quad (5)$;

$\text{CH}_2\text{-CH}_3 + \text{CH}_2\text{-CH}_2 \xrightarrow{\text{cat}} \text{CH=CH}_2 + \text{C}_2\text{H}_6 + \text{cat}^* \quad (6)$. On hydrogenation of a

mixture of two olefins, such a disproportionation would lead to products
which do not occur in the case of separate hydrogenation of a single olefin:

$\text{CH}_3\text{-CH-CH}_2 + \text{CH}_2\text{-CH}_2 \xrightarrow{\text{cat}} \text{CH}_2\text{=CH-CH}_2 + \text{CH}_3\text{-CH}_2 \quad (7)$. On these conditions

the following predictions are made: 1) In the case of joint hydrogenation
of ethylene and propylene, the ratio w_{32}/w_{23} of the initial reaction rates

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On Two Types of Elementary Reactions in the
Catalytic Hydrogenation of Olefins

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B004/B056

will be smaller than w_3/w_2 (ratio of the initial rates in the case of separate hydrogenation of the two olefins). 2) The difference between w_{32}/w_{23} and w_3/w_2 will decrease with increasing hydrogen pressure because then recombination of the surface radicals with hydrogen atoms will be the chief process. 3) The greatest difference between w_{32}/w_{23} and w_3/w_2 must be observed at low temperatures, at which olefin concentration on the catalyst is higher than in the case of high temperatures, and therefore the portion of disproportions will increase. In order to check these assumptions, joint hydrogenation of ethylene and propylene was carried out in a circulation device with electrically heated platinum wire as catalyst. Reaction was studied by means of a pressure-gauge (measurement of pressure variations in the system) and mass-spectroscopic analysis of the reaction products. The experiments were performed at 525 mm Hg, a ratio of olefins: hydrogen = 1 : 1 to 1 : 20, in the temperature range of 0 - 280°C. The results are presented in Table 1. They confirm the assumptions and predictions made by the authors. Two types of reactions occur on olefin hydrogenation, namely recombination and disproportionation.

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On Two Types of Elementary Reactions in the
Catalytic Hydrogenation of Olefins

S/020/61/136/001/034/037
B004/B056

Besides, the results may be taken a proof of the existence of surface molecules. There are 2 figures, 1 table, and 7 references: 2 Soviet, 8 US, 5 British, and 1 Japanese.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

PRESENTED: July 14, 1960 by N. N. Semenov, Academician

SUBMITTED: July 7, 1960

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S/020/61/136/001/034/037
B004/B056

Table 1 Таблица 1

№№ опытов 1)	H ₂	C ₂ H ₄	C ₃ H ₆	ω ₁	ω ₂	ω	ω ₂₁	ω ₂₂	ω ₂₃	ω ₂₄	ω ₂₅	ω ₂₆	ω ₂₇	ω ₂₈	ω ₂₉	ω ₃₀
	мм рт. ст. 1)			мм рт. ст./мин. 2)						ω ₂ ω ₁						ω ₂ ω ₁
40	25	25	25	0.45	0.68	0.59	0.445	0.145		1.46	0.32	0.00	0.22	1.06		
26	25	25	25	0.95	0.05	1.00	0.645	0.355		1.00	0.55	0.68	0.375	1.65		
11 c	50	25	25	1.87	1.45	1.65	1.00	0.65		0.775	0.65	0.54	0.45	1.01		
4	50	25	25	2.85	1.63	2.10	1.20	0.81		0.508	0.66	0.41	0.52	0.91		
7	50	25	25	3.75	1.00					0.508						
3 c	100	25	25	3.90	1.00	2.85	1.65	1.20		0.487	0.73	0.423	0.63	0.08		
10	100	25	25	2.80	1.35	2.00	1.16	0.835		0.462	0.72	0.416	0.617	0.06		
22	100	25	25	1.00	0.56	0.84	0.484	0.350		0.471	0.73	0.45	0.637	1.04		
20 c	100	25	25													
31	150	25	25													
20	150	25	25													
11 c	150	25	25													
18	200	25	25													
23	200	25	25													
15	250	25	25													
32	250	25	25													
9 c	250	25	25													
43	350	25	25													
46	350	25	25													
45 c	350	25	25													
37	500	25	25													
39	500	25	25													
10 c	500	25	25													

Card 5/6

S/020/61/136/001/034/037
B004/B056

Legend to Table 1. 1) Number of the experiment; 2) torr; 3) torr/min.

Card 6/6

SHATENSHTEYN, A.I.; SHAPIRO, I.O.; YAKUSHIN, F.S.; ISAYEVA, G.G.; RANNEVA, Yu.I.

Comparison of the acidity of organic compounds in dimethylsulfoxide, ammonia, and cyclohexylamine based on the variation of hydrogen exchange rates. Kin. i kat. 5 no.4:752-753 J1-Ag '64. (MIRA 17:11)

1. Fiziko-khimicheskiy institut imeni Karpova.

SHATENSHTEYN, A.I.; YAKUSHIN, F.S.; ARSHINOVA, M.I.; YAKOVLEVA, Ye.A.

Kinetic isotope effect in deuterium and tritium exchange between
hydrocarbons and bases. Kin.1 kat. 5 no.6:1000-1007 N-D '6%.
(MIRA 18:3)

1. Fiziko-khimicheskiy institut imeni Karpova, Moskva.

SHATENSHTEYN, A.I.; MANOCHKINA, P.N.; YAKUSHIN, F.S.; YAKOVLEVA, Ye.A.

Hydrogen exchange in the aliphatic amines as solvents. Zhur. ob.
khim. 34 no.8:2779-2784 Ag '64. (MIRA 17:9)

1. Fiziko-khimicheskiy institut im. L.Ya. Karpova, Moskva.

YAKUSHIN, G.Ya., veterin.vrach

Circular shower bath for animals. Veterinariia 37 no.7:81 J1 '60.
(MIRA 16:2)
(Veterinary hygiene--Equipment and supplies)

YAKUSHIN I.

SHARYPIN, I.; YAKUSHIN, I.

New rate terms and shortened workday at chemical plants. Sots. trud
no.2:116-125 P '58. (MIRA 11:1)

1. Nachal'nik otdela truda i zarabotnoy platy Voskresenskogo khimi-
cheskogo kombinata (for Sharypin). 2. Nachal'rik otdela truda
Stalinogorskogo khimicheskogo kombinata (for Yakushin).
(Chemical industries--Production standards)

YAKUSHIN, I. (g.Kursk)

Problems of waste collectors. Mest. prom. i khud. promys.
2 no.6:12 Je '61. (MIRA 14:7)
(Salvage(Waste, etc.))

OVCHINNIKOV, Ivan Nikolayevich. Prinimal uchastiye YAKUSHIN, I.A.,
inzh.; OBRATSOV, B.M., kand. tekhn. nauk, retsenzent;
RUBASHKIN, R.A., inzh., retsenzent; TISHKOVETS, I.V.,
nauchn. red.; NIKITINA, R.D., red.; ALEKSANDROV, A.V., kand.
tekhn. nauk, red.

[Ship systems and pipelines; arrangement, manufacture and in-
stallation] Sudovye sistemy i truboprovody; ustroistvo, izgo-
tovlenie i montazh. Leningrad, Sudostroenie, 1964. 310 p.
(MIRA 18:3)

I 9487-66 EWT(d)/EWT(m)/ENP(r)/ENP(t)/ENP(k)/ENP(h)/ENP(l)/ENA(h)/ENP(b) JD
 ACC NR: AP5026775 SOURCE CODE: UR/0286/65/000/017/0061/0061

INVENTOR: Vykhukholev, V. F.; Glazyrin, V. N.; Il'in, A. T.; Kozlov, I. I.;
Yakushin, I. A.; Davletkhanov, R. B.

ORG: none

TITLE: Book-fold casting machine for thin-walled large parts. Class 31, No. 174340

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 61

TOPIC TAGS: casting, book fold casting, thin wall part, large part, part casting

ABSTRACT: This Author Certificate introduces a machine for book-fold casting of large thin-walled parts. The machine (see Fig. 1) contains two movable molds mounted on a frame, forming the upper part of the liquid metal container. To regulate the

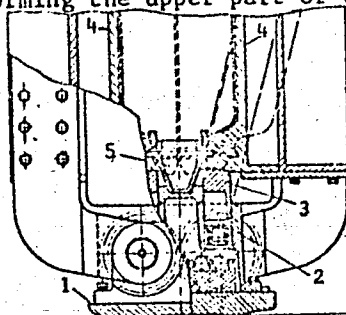


Fig. 1. Casting machine

1 - Welded frame; 2 - interchangeable base;
 3 - supports; 4 - mold; 5 - container.

Card 1/2

UDC: 621.74.043.2

L 9487-66

ACC NR: AP5026775

0

volume of the container, the machine is provided with an interchangeable base mounted on the frame and supports which form the bottom of the container. To ensure a close fitting of supports with molds, the supports are pressed against the mold by springs and the upper part of the supports has a configuration ensuring close contact with the molds during mold rotation. Orig. art. has: 1 figure. [42]

SUB CODE: 13/ SUBM DATE: 26Dec63/ ATD PRESS: 4164

lch
Card 2/2

KARPOV, A.I., glavnyy mekhanik; YAKUSHIN, I.T., inzhener-konstruktor.

Improving parchmentization machines. Bum.prom. 31 no.10:22-23 O '56.
(MIRA 10:1)

1. Vtoraya Leningradskaya bumazhnaya fabrika.
(Leningrad--Papermaking machinery)

YAKUSHIN, I.T., inzhener-konstruktor.

Multi-disk friction calendar rolls. Bum.prom. 32 no. 4:26 Ap '57.
(MIRA 10:7)

1. Vtoraya Leningradskaya bumazhnaya fabrika.
(Papermaking machinery)

BELANOVSKIY, Nikolay Grigor'yevich; YAKUSHIN, Leonid Leonidovich;
KHAYMOVICH, Moysey Shmulevich; KASPERSKAYA, Is., red.; GUSAROV,
K., tekhn.red.

[Handbook for the shoe machinery operator] Spravochnik mekhanika-
obuvshchika. Kiev, Gos.izd-vo tekhn.lit-ry USSR, 1960. 426 p.
(MIRA 13:5)

(Shoe machinery)

YAKUSHIN, M.I. (Moskva)

Using electromechanical transducers in measuring minor
aerodynamic forces. Izv. AN SSSR. Otd. tekhn. nauk. Mekh. i
mashinostr. no. 1: 157-158 Ja-F '63. (MIRA 16:2)
(Electronic instruments) (Torsion balance)

ACCESSION NR: AP5001487

S/0065/64/000/012/0024/0027

30
28
B

AUTHOR: Yakushkin, M. I.; Nichugovskaya, K. M.

TITLE: Synthesis of the higher molecular weight secondary N-benzyl-n-alkyla-

TOPIC TAGS: benzylalkylamine, organic synthesis, hydrogenation, Shiff's base,

ABSTRACT: A study is made of the efficiency of the extraction of uranium from sulfuric acid solutions by promoting quaternary ammon-

ly it is important to find efficient methods for their synthesis. The investigation was directed at synthesis of higher N-benzylalkylamines by hydrogenation of

Card 1/2

L 25270-03

ACCESSION NR: AP5001487

1. Synthesis of Schiff's bases to condensation of benzaldehyde with aliphatic amines



2. Hydrogenation of the obtained Schiff's bases to corresponding N-benzylalkylamines



The optimum conditions for synthesis were: hydrogenation temperature--100 C, pressure--50 kg/cm², amounts of catalyst--5-10% of the weight of amine, molar ratio of amine: benzaldehyde = 1:1 and n-heptane as solvent. Orig. art. has

3 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskoy promyshlennosti (All-Union Scientific Research Institute of the Petrochemical Industry)

SUBMITTED 00

ENCL 00

SUB CODE 00, 00

NR REF SOV 004

OTHER 006

377
KOSTERIN, B. I.; MARENKO, A. G.; MOTULEVICH, V. P.; SERGEYEV, A. B.; YAKUBCHIK, M. I.

"Wind tunnel with a gas heated by a high-frequency discharge."
report submitted for 2nd All-Union Conf on Heat & Transfer, Minsk, 4-12 May
1964.
Mechanics Inst, AS USSR.

PHASE I BOOK EXPLOITATION

SOV/1190

1(4)

Vestnik vozdushnogo flota

Vozdushnyy boy pary i zvena istrebiteley (Aerial Combat of
Fighter Planes in Pairs and Flights) Moscow, Ooborongiz,
1958. 126 p. No. of copies printed not given.

Compilers: Yakushin, M.N., Maj Gen of Aviation, and Vazhin, F.A.,
Lt Col; Ed.: Gavrillov, N.N., Lt Col; Tech. Ed.: Myasnikova,
T.F.

PURPOSE: The book is intended for fighter pilots of aviation
units and aviation schools, and may also prove useful to
reserve pilots, aeroclub flying personnel, and the general
reader.

COVERAGE: The articles selected by the editors for this book
were previously published in the periodical Vestnik vozdush-
nogo flota, 1955-1957. They reflect the personal views of
the respective authors on practical methods of conducting
aerial combats in pair and flight formations of fighter planes

Card ~~5~~

137-58-4-6882

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 80 (USSR)

AUTHOR: Yakushin, M. V.

TITLE: Electrolytic Production of a Lead-calcium Alloying Element
(Polucheniye svintsovokal'tsiyevoy ligatury elektroliticheskim
metodom)

PERIODICAL: Sb. tr. Vses. n.-i. in-ta tsvetn. met., 1956, Nr 1, pp 79-91

ABSTRACT: Industrial production of a Pb-Ca alloying element by electrolysis of technical CaCl_2 by means of a liquid Pb cathode is feasible. The bath may operate continuously, with periodic tapping of the product. The major conditions of operation are: electrolyte temperature 750°C and continuous stirring of the product. The following criteria are attainable in producing an alloying element containing 4-5% Ca: Ca current efficiency $> 50\%$, power consumption 40 kwh per kg Ca, and 60% utilization of the CaCl_2 .

G. S.

1. Lead calcium alloys--Production 2. Electrolytes--Processes

Card 1/1

SOV/136-58-8-4/27

AUTHORS: Novoselov, S.S. and Yakushin, M.V.

TITLE: New Method of Decoppering Crude Lead (Novyy sposob obezmezhvaniya chernovogo svintsa).

PERIODICAL: Tsvetnyye Metally, 1958, ^{3/}Nr.8, pp.15-20 (USSR)

ABSTRACT: The work described was carried out with the participation of O.P. Shumilov, R.I. Yushchenko, N.I. Kashcheyev, A.K. Kukharev and A.S. Berezin. The authors discuss decoppering procedures at existing Soviet lead works, showing the transfer of elements from the raw materials to the dross (Table 1). The reverberatory method of treating dross gives better results than the shaft-smelting, but it is not used in the USSR. Since 1927 efforts have been made to find a method eliminating dross production (Refs. 1,2). In 1956 the authors proposed a method for continuous refining of lead with the extraction of copper into the matte and arsenic into the speiss in an electric furnace (Fig.1) in which the slag layer (15-30% FeO, 20-35% SiO₂, 10-25% CaO) acts as the heater and protects sulphides and metals from oxidation. Slag

Card 1/3

SOV/136-58-8-4/27

New Method of Decoppering Crude Lead.

temperature is 1200°C, the top and bottom of the lead layer then being at 950-1000 and 400-450°C, respectively: experiments suggest that for a full-scale unit the depth of the lead to give the required temperature gradient will be 1-1.5 m and that a specific daily productivity of 15-30 tons per m² will be obtainable. The lead is tapped from the bottom of the hearth by a syphon tube. The authors describe large-scale laboratory tests with a unit (Fig.2) dealing daily with 350-1200 kg of crude lead (91.8% Pb, 5.68% Cu, 1.26% As, 0.56% Sb, 2158 g/ton Ag, 26.8 g/ton Au and 0.5% S). 10-40 mm lumps of pyrites (44.5% S, 38.83% Fe and 7.46% SiO₂) was used for sulphiding. The effectiveness of the method is shown by the compositions of the purified lead, matte and speiss (Table 2) and the distribution of elements between the purified lead, matte and speiss; but an editorial note by F.M. Loskutov states there is not enough evidence for comparing the new method with the existing one. The method has been accepted for pilot-scale testing at the Ust'-Kamenogorsk Kombinat. There are 2 figures,

Card 2/3

SOV/136-58-8-4/27

New Method of Decoppering Crude Lead.

4 tables and 6 Soviet references.

ASSOCIATION: VNIITsvetmet.

1. Lead--Purification
2. Copper--Separation
3. Furnaces
- Performance
4. Lead--Test results

Card 3/3

ARTAMONOV, K.I.; LEBEDEV, N.I.; YERGALIYEV, E.Ye.; LESECHKO, A.K.;
YAKUSHIN, M.V.; KAZAKOV, V.N.; BRYUKHANOV, N.G.; NIKITINA, L.I.;
~~KHVESYUK, F.I.~~; Primalni uchastiye: MATVEYEV, A.T.; KOVALEV, S.I.;
ROMANOV, V.S.; MARCHENKO, B.P.; ZUDOVA, T.I.; OMAROV, M.N.;
PECHENKIN, S.N.; LUKIN, Ye.G.; KHLUDKOV, V.I.

Shaft-furnace copper smelting with an oxygen-enriched blow.
TSvet. met. 34 no.3:32-39 Mr '61. (MIRA 14:3)

1. Irtyshskiy polimetallicheskiy kombinat (for Artamonov, Lebedev,
Yergaliyev, Lesechko, Matveyev, Kovalev, Romanov, Marchenko, Zudova,
Omarov). 2. Vsesoyuznyy nauchnoissledovatel'skiy institut tsvetnykh
metallov (for Yakushin, Kazakov, Bryukhanov, Nikitina, Khvesyuk,
Pechenkin, Lukin, Khludkov).

(Copper—Metallurgy) (Oxygen—Industrial applications)

YAKUSHIN, M.V.; BRYUKHANOV, N.G.; KAZAKOV, V.N. ; NIKITINA, L.I.;
KHVESYUK, F.I.; PECHENKIN, S.N.; ARTAMONOV, K.I.; LEBEDEV, N.I.;
MATVEYEV, A.T.; KOVALEV, S.I.

Converter treatment of complex metal mattes with an oxygen
enriched blow. TSvet.met. 34 no.10:34-39 0 '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tsvetnykh metallov
(for Yakushin, Bryukhanov, Kazakov, Nikitina, Khvesyuk, Pechenkin).
 2. Irtyshskiy polimetallicheskiy kombinat (for Artamonov, Lebedev,
Matveyev, Kovalev).
- (Nonferrous metals--Metallurgy) (Converters)

S/137/63/000/002/016/034
A006/A101

AUTHORS: Yakushin, M. V., Bryukhanov, I. G., Nikitina, L. I., Khvesyuk, F.I.

TITLE: The use of oxygen at the Irtysh copper-melting plant

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2, 1963, 35, abstract 20185
("Sb. tr. Vses. n.-i. gornometallurg. in-t tsvetn. met.", 1962,
no. 7, 62 - 77)

TEXT: At the Irtysh copper-melting plant O_2 -enriched blast is used in shaft melting and converting. With a higher O_2 content in the blast the output of the shaft furnaces per 1 nm^3 of blast increases and is at a constant 23.75% O_2 in the blast as high as 117.5%, at 25.2% O_2 - 129.6% and at 27.3% O_2 - 156.8%. In converting, the increased O_2 content in the blast up to 23.3% raises the efficiency of the converters per 1 hour blast by 20% and per 1 hour operation by 14 - 15%. At a 25.3% O_2 in the blast, the efficiency of the converter per 1 hour blast increases by 37 - 40% and per 1 hour operation by 23 - 25%. The temperature of exhaust gases in the shaft furnace decreases from 590 to 320°C (at 27.3%

Card 1/2

S/137/63/000/002/016/034

A006/A101

The use of oxygen at the Irtysh copper-melting plant

O₂). The output of cyclon dust in the use of blast enriched with O₂, decreases by 15 - 20%. The scum formation in the tuyere zone and the furnace top is reduced. There are 10 references.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 2/2

YAKUSHIN, N. P.

USSR :

YAKUSHIN, N.P., ARKHANGEL'SKIY, A.F.,

Mine Ventilation

Ventilation of vertical mine shafts in the process of their sinking. Ugol' 27 no. 4, 1952.

Monthly List of Russian Accessions, Library of Congress, August, 1952. Unclassified.

Yakushin N.P.

ANDROS, I.P., inzh.; ASSONOV, V.A., kand. tekhn. nauk.; BERNSTEYN, S.A., inzh.; BOKII, B.V., prof.; BROVMAN, Ya.V., inzh. BONDARENKO, A.P., inzh.; BUCHNEV, V.K., kand. tekhn. nauk; VERESKUNOV, G.P., kand. tekhn. nauk; VOLKOV, A.F., inzh.; GELESKUL, M.H., kand. tekhn. nauk; GORODNICHIEV, V.M., inzh.; DEMENT'YEV, A.Ya., inzh.; DOKUCHAYEV, M.M., inzh.; DUBNOV, L.V., kand. tekhn. nauk; YEPIFANTSEV, Yu.K., kand. tekhn. nauk.; YERASHKO, I.S., inzh.; ZHEDANOV, S.A., kand. tekhn. nauk; ZIL'BERBROD, A.F., inzh.; ZINCHENKO, E.M., inzh.; ZORI, A.S., inzh.; KAPLAN, L.B., inzh.; KATSAUROV, I.N., dots.; KITAYSKIY, E.V., inzh.; KRAVTSOV, Ye.P., inzh.; KRIVOROG, S.A., inzh.; KRINITSKIY, L.M., kand. tekhn. nauk; LITVIN, A.Z., inzh.; MALEVICH, N.A., kand. tekhn. nauk; MAN'KOVSKIY, G.I., doktor tekhn. nauk; MATKOVSKIY, A.L., inzh.; MINDELI, E.O., kand. tekhn. nauk; NAZAROV, P.P., kand. tekhn. nauk; NASONOV, I.D., kand. tekhn. nauk; NAYYENBURG, V.Ye., kand. tekhn. nauk; POKROVSKIY, G.I., prof., doktor tekhn. nauk; PROYAVKIN, E.T., kand. tekhn. nauk; ROZENBAUM, inzh.; ROSSI, B.D., kand. tekhn. nauk; SEMEVSKIY, V.N., doktor tekhn. nauk; SKIRGELLO, O.B., inzh.; SUKHUT, A.A., inzh.; SUKHANOV, A.F., prof., doktor tekhn. nauk; TARANOV, P.Ya., kand. tekhn. nauk; TOKAROVSKIY, D.I., inzh.; TRUPAK, N.G., prof., doktor tekhn. nauk; FEDOROV, S.A., prof., doktor tekhn. nauk; FEDYUKIN, V.A., inzh.; KHOKHLOVKIN, D.M., inzh.; KHRABROV, N.I., kand. tekhn. nauk; CHEKAREV, V.A., inzh.; CHERNAVKIN, N.N., inzh.; SHREYBER, B.P., kand. tekhn. nauk; EPOV, B.A., kand. tekhn. nauk; YAKUSHIN, N.P., kand. tekhn. nauk; YANCHUR, A.M., inzh.; YAKHONTOV, A.D., inzh.; POKROVSKIY, N.M., otvetstvennyy red.; KAPLUN, Ya.G. [deceased], red.; MONIN, G.I., red.; SAVITSKIY, T., (Continued on next card)

ANDROS, I.P.---(continued) Card 2.

red.; SANOVICH, P.O., red.; VOLOVICH, M.Z., inzh., red.; GORITSKIY,
A.V., inzh., red.; POLUYANOV, V.A., inzh., red.; PADZYEV, E.I.,
inzh., red.; OMOHKOY, L.V., red. izd-va; PROZOROVSKAYA, V.L.,
tekhn. red.; NADKINSKAYA, A.A., tekhn. red.

[Mining; an encyclopaedic handbook] Gornoe delo; entsiklopedicheski
spravochnik, Glav. red. A.M. Terpigorev. Moskva, Gos. nauchno-
tekhnicheskoe izd-vo lit-ry po ugol'noi promyshl. Vol. 4 [Mining
and timbering] Provedenie i krepleniye gornykh vyrabotok. Red-
kollegiya: toma: N.M. Pokrovskii... 1958. 464 p. . (MIRA 11:7)

(Mine timbering) (Mining engineering)

Yakushin, N.B.

KRSTOSHEVSKIY, L.S.; DANCHICH, V.V.; AVDIYENKO, T.G.; ARKHANGEL'SKIY, A.F.;
GAK, A.M.; YEFIFANTSEV, Yu.P.; ZELINSKIY, V.M.; IVANOV, P.S.; IVASHCHENKO,
P.R.; KALININA, M.D.; KRAVCHENKO, A.G.; KOTLYAROVA, A.V.; KRUGLYAKOVA,
M.D.; LEVIKOV, I.I.; LIBKIND, R.I.; NIKOLAYEVA, N.A.; NAUMENKO, V.F.;
PRESEMAN, I.B.; PRISTAZHNIKOV, V.S.; POBEDINSKAYA, L.P.; POKALYUKOV,
S.N.; POPOV, A.A.; SOLOMENTSEV, M.N.; TARASOV, I.V.; FILONENKO, A.S.;
SHISHOV, Ye.L.; SHRAYMAN, L.I.; YAKUSHIN, N.P.; ZVORYKINA, L.N., red.
izd-va; LOMILINA, L.N., tekhn.red.

[Horizontal mining in foreign countries] Provedenie gorizonta'nykh
vyrabortok za rubezhom. Moskva, Ugletekhizdat, 1958. 342 p. (MIRA 12:4)

1. Kharkov. Vsesoyuznyy nauchno-issledovatel'skiy institut organizatsii
i mekhanizatsii shakhtnogo stroitel'stva.
(Mining engineering)

YAKUSHIN, N.P., kand.tekhn.nauk

Ventilation of mine shafts after blasting holes. Bezop.truda v prom.
2 no.5:9-10 My '58. (MIRA 11:4)
(Mine ventilation)

YAKUSHIN, N.P., kand.tekhn.nauk

Some problems of mining in gaseous rocks. Shakht.stroi. no.10:
3-6 '58. (MIRA 11:11)

1. Ukrainskiy nauchno-issledovatel'skiy institut organizatsii i
mekhanizatsii shakhtnogo stroitel'stva.
(Mining engineering) (Mine gases)

YAKUSHIN, Nikolay Petrovich; GRISHAYENKO, M.I., otv.red.; NADEINSKAYA,
M.M., tekhn.red.; CHANTSEVA, G.M., tekhn.red.

[Mine ventilation during the opening of very long galleries]
Provetrivanie pri prokhodke gornykh vyrabotok bol'shoi dliny.
Moskva, Ugletekhizdat, 1959. 131 p. (MIRA 12:5)
(Mine ventilation)

BUBLIKOV, Yevgeniy Vladimirovich, inzh.; VINARSKIY, Yerim Naumovich, inzh.;
DANCHICH, Valeriy Valerianovich, inzh.; DOKUKIN, Oleg Semenovich,
inzh.; LINKOV, Aleksandr Viktorovich, inzh.; TELEPHEV, Dmitriy
Yakovlevich, inzh.; FEDOROV, Sergey Vasil'yevich, inzh.; FEDOROV,
Georgiy Dmitriyevich, inzh.; YAKUSHIN, Nikolay Petrovich, kand.tekhn.
nauk, inzh.; ZHADAYEV, V.G., otv.red.; SMIRNOV, L.V., red.izd-va;
SABITOV, A., tekhn.red.

[Selection of equipment for vertical shaft sinking] Vyor oborudova-
niia dlia prokhodki vertikal'nykh stvolov shakht. Moskva, Ugletekh-
izdat, 1959. 251 p. (MIRA 12:8)

1. Sotrudniki Ukrainskogo Nauchno-issledovatel'skogo instituta organi-
zatsii i mekhanizatsii shakhtnogo stroitel'stva (UkrNIIOmShS) (for
all except Zhadayev, Smirnov, Sabitov).
(Shaft sinking) (Mining machinery)

ROD'KIN, Ivan Stepanovich; YAKUSHIN, N.P., kand.tekhn.nauk, retsenzent;
PARAMOSHIN, N.T., retsenzent; DUGANOV, G.V., kand.tekhn.nauk,
retsenzent; YAROVY, I.M., retsenzent; IONATENKO, K.P., otv.red.;
ZVORYKINA, L.N., red.izd-va; BERESLAVSKAYA, L.Sh., tekhn.red.

[Ventilation in the course of mine building] Provetrivanie gornyykh
vyrabotok pri stroitel'stve shakht. Moskva, Gos.nauchno-tekhn.izd-vo
lit-ry po gornomu delu, 1960. 163 p. (MIRA 13:7)

1. Nachal'nik laboratorii ventilyatsii Ukrainskogo Nauchno-issledo-
vatel'skogo instituta organizatsii i mekhanizatsii shakhtnogo stroi-
tel'stva (UkrNIOMSHS) (for Yakushin). 2. Nachal'nik sektora tekhniki
bezopasnosti kombinata Stalinshakhtostroy (for Paramoshin).
(Mine ventilation) (Mining engineering)

YAKUSHIN, N.P., kand.tekhn.nauk

Determining the amount to be expected of methane emission during mine shaft sinking. Ugol' Ukr. 4 no.2:9-12 F '60.
(MIRA 13:6)

(Mine gases) (Shaft sinking)

YAKUSHIN, Nikolay Petrovich, kand. tekhn.nauk; DUGANOV, G.V., otv.
red.; CHERNEGOVA, E.N., red. izd-va; MINSKER, L.I., tekhn.
red.; SABITOV, A., tekhn. red.

[Ventilation and the control of gases in sinkign mine shafts]
Provetrivanie i bor'ba s gazami pri prokhodke stvolov shakht.
Moskva, Gosgortekhnizdat, 1962. 230 p. (MIRA 15:9)
(Mine ventilation)

YAKUSHIN, P.M.; TYIKIN, M.N., redaktor; PULIN, L.I., tekhnicheskiy redaktor

[Safety engineering in metal working and hot metal shops] Tekhnika
bezopasnosti v metalloobrabatyvaiushchikh i goriachikh tsekhakh
v pomoshch' tokariu, slasariu, pressovshchiku, elektrogasosvarshchi-
ku, kuznetsu, termistu, liteishchiku. [Tula] Tul'skoe knizhnoe izd-vo,
1956. 54 p. (MIRA 10:9)

(Machinery industry--Safety measures)

YAKUSHIN, S.

Improving the hydrometeorological service to the merchant marine.
Mor. flot. 16 no.3:10-11 Mr 56. (MIRA 9:7)

1. Zamestitel' nachal'nika Upravleniya sluzhby prognozov GU Gidro-
metsluzhby.

(Meteorology, Maritime)

YAKUSHIN, S. I.

Zadachi prigorodnogo passazhirskogo dvizhenia. /The problems of interurban passenger traffic/. (Sots. transport, 1937, no. 11-12, p. 102-112).

DLC: HE7.S6

SO: Soviet Transportation and Communication, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

YAKUSHIN, S. I.

Organizatsiia passazhireskikh perevozok na zheleznnykh dorogakh. /Organization of passenger traffic on railroads/. Moskva, Transzheldorizdat, 1939. 328p. illus.

Osnovnye vozmozhnosti povysheniia neftepervezok. /Real possibilities for increasing oil transport/. (Zheldor. transport, 1948, no. 4, p. 58-65).

DLC: HE7.25

SO: Soviet Transportation and Communication, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

AKUSHIN, S.I.
 BUNESHEVICH, I.I., kandidat tekhnicheskikh nauk; BOGIN, N.M., kandidat tekhnicheskikh nauk; BYKOV, Ye.I., inzhener; VLASOV, I.I., kandidat tekhnicheskikh nauk; GRITSHEVSKIY, M.Ye., inzhener; GRUBER, L.O., inzhener; GURVICH, V.G., inzhener; DAVYDOV, V.N., inzhener; YER-SHOV, I.M., kandidat tekhnicheskikh nauk; ZASORIN, S.N., kandidat tekhnicheskikh nauk; IVANOV, I.I., kandidat tekhnicheskikh nauk; KRAUKLIS, A.A., inzhener; KROTOV, L.B., inzhener; LAPIN, V.B., inzhener; LASTOVSKIY, V.P., dotsent; LATUNIN, N.I., inzhener; MARKVARDT, K.G., professor, doktor tekhnicheskikh nauk; MAKHAYLOV, M.I., professor, doktor tekhnicheskikh nauk; NIKANOROV, V.A., inzhener; OSKOLKOV, K.N., inzhener; OKHOSHIN, L.I., inzhener; PARFENOV, K.A., dotsent, kandidat tekhnicheskikh nauk; PERTSOVSKIY, L.M., inzhener; POPOV, I.P., inzhener; PORSHNEV, B.G., inzhener; RATNER, M.P., inzhener; ROSSIYEVSKIY, G.I., dotsent, kandidat tekhnicheskikh nauk; RYKOV, I.I., kandidat tekhnicheskikh nauk; RYSHKOVSKIY, I.Ya., dotsent, kandidat tekhnicheskikh nauk; RYABKOV, A.Ya., professor [deceased]; TAGER, S.A., kandidat tekhnicheskikh nauk; KHAZEN, M.M., professor, doktor tekhnicheskikh nauk; CHERNYSHEV, M.A., doktor tekhnicheskikh nauk; MBIN, L.Ye., professor, doktor tekhnicheskikh nauk; YURENEV, B.N., dotsent; AKSENOV, I.Ya., dotsent, kandidat tekhnicheskikh nauk; ARKHANGEL'SKIY, A.S., inzhener; BARTENEV, P.V., professor, doktor tekhnicheskikh nauk; BERNARD, K.A., kandidat tekhnicheskikh nauk; BOROVOY, N.Ye., dotsent, kandidat tekhnicheskikh nauk; BOGDANOV, I.A., inzhener; BOGDANOV, N.K., kandidat tekhnicheskikh nauk; VINNICHENKO, N.G., dotsent, kandidat ekonomicheskikh nauk;
 (Continued on next card)

RENKESHEVICH, I.I.----(continued) Card 2.

VASIL'YEV, V.P.; GONCHAROV, N.G., inzhener; DERIBAS, A.T., inzhener;
DOBRORSKIY, K.M., dotsent, kandidat tekhnicheskikh nauk; DLUGACH,
B.A., kandidat tekhnicheskikh nauk; YEFIMOV, G.P., kandidat tekni-
cheskikh nauk; ZEMBLINOV, S.V., professor, doktor tekhnicheskikh
nauk; ZABELLO, M.L., kandidat tekhnicheskikh nauk; IL'IN, K.P.,
kandidat tekhnicheskikh nauk; KARSTNIKOV, A.D., kandidat tekhnich-
eskikh nauk; KAPLUN, F.Sh., inzhener; KANSHIN, M.D.; KOCHNEV, F.P.,
professor, doktor tekhnicheskikh nauk; KOGAN, L.A., kandidat tekhnich-
eskikh nauk; KUZHURIN, S.F., inzhener; LEVASHOV, A.D., inzhener;
MAKSIMOVICH, B.M., dotsent, kandidat tekhnicheskikh nauk; MARTYNOV,
M.S., inzhener; MEDEL', O.M., inzhener; NIKITIN, V.D., professor,
kandidat tekhnicheskikh nauk; PADNYA, V.A., inzhener; PANTILEYEV, P.I.,
kandidat tekhnicheskikh nauk; PETROV, A.P., professor, doktor tekhnich-
eskikh nauk; POVOZHENKO, V.V., professor, doktor tekhnicheskikh
nauk; PISKAREV, I.I., dotsent, kandidat tekhnicheskikh nauk; SERGEYEV,
Ye.S., kandidat tekhnicheskikh nauk; SIMONOV, K.S., kandidat tekhnich-
eskikh nauk; SIMANOVSKIY, M.A., inzhener; SUYAZOV, I.G., inzhener;
TAIDAYEV, F.Ya., inzhener; TIKHONOV, K.K., kandidat tekhnicheskikh
nauk; USHAKOV, N.Ya., inzhener; USPENSKIY, V.K., inzhener; FEL'DMAN,
M.D., kandidat tekhnicheskikh nauk; FERAPONTOV, G.V., inzhener;
KHOKHLOV, L.P., inzhener; CHERNOMORDIK, G.I., professor, doktor
tekhnicheskikh nauk; SHAMAYEV, M.F., inzhener; SHAFIRKIN, B.I.,
inzhener; YAKUSHIN, S.I., inzhener; GRANOVSKIY, P.G., redaktor;
TISHCHENKO, A.I., redaktor; ISAYEV, I.P., dotsent, kandidat tekhnich-
eskikh nauk, redaktor; KLIMOV, V.F., dotsent kandidat tekhnicheskikh
(Continued on next card)

BEKESHEVICH, I.I.--- (continued) Card 3.

nauk, redaktor; MARKOV, M.V., inzhener, redaktor; KALININ, V.K., inzhener, redaktor; STEPANOV, V.M., professor, redaktor; SIDOROV, N.I., inzhener, redaktor; GYRONIMUS, B.Ye., kandidat tekhnicheskikh nauk, redaktor; ROBBL', R.I., otvetstvennyy redaktor

[Technical reference manual for railroad engineers] Tekhnicheskii spravochnik zheleznodorozhnika. Moskva, Gos. transp.zhel-dor. izd-vo. Vol.10. [Electric power supply for railroads] Energosnabzhenie sheleznykh dorog. Otv.red. toma K.G.Markvardt. 1956. 1080 p. Vol.13. [Operation of railroads] Eksploatatsiia sheleznykh dorog. Otv. red. toma R.I.Robbl'. 1956. 739 p. (MLRA 10:2)

1. Chlen-korrespondent Akademii nauk SSSR (for Petrov)
(Electric railroads) (Railroads--Management)

YAKUSHIN, SEMEN IVANOVICH

ZAPOROZHSEV, Grigoriy Petrovich; YAKUSHIN, Semen Ivanovich; DIUGACH, B.A.,
redaktor; BOBROVA, Ye.N., tekhnicheskii redaktor

[New railroad stations] Novye zheleznodorozhnye vokzaly. Moskva,
Gos.transp.zhel-dor. izd-vo, 1957. 461 p. (MIRA 10:7)
(Railroads--Stations)

YAKUSHIN, V.

Beacons of the seven-year plan. Za bezop.divzh. 5 no.11:3 7 '62.
(MIRA 15:12)

1. Inzh.-inspektor 5-y avtobazy tresta Mosavtozheldor.
(Moscow--Traffic safety)

SOV/97-58-9-2/13

AUTHORS: Berdichevskiy, G.I., Mikhaylov, K.V., Candidates of Technical Sciences and Yakushin, V.I., Engineer.

TITLE: Pre-cast Pre-stressed Reinforced Concrete Roof Trusses for Industrial Buildings Manufactured by the Method of Vibro-stamping ((Predvaritel'no napryazhennyye zhelezo-betonnyye balki pokrytiy pronyazhlennykh zdaniy, izgotovlyayemye s primeneniye vibroshtampovaniya)

PERIODICAL: Beton i Zhelezobeton, 1958, Nr 9, pp 323 - 329 (USSR)

ABSTRACT: Results of investigations proved the reliability of the construction of described trusses as far as strength against crack formations is concerned. It was established that for multi-bay constructions, low-alloy steel of non-periodical profile of 32 mm Mark 30KhG2S could be used, as well as self-anchoring fixing. In the case of trusses with batch reinforcement, a sample construction of half-trusses was designed, an allowance for welded joint being made. Batches of steel wires (7 wires) of 5 mm diameter were bent up 2 m from the end of the truss and splayed in a fan-shape by which considerable simplification of casting was achieved, without losing strength. The bending of the tensioned reinforcement from the lower flange into the wall of the web (fan shape) was carried

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SOV/97-58-9-2/13

Pre-cast Pre-stressed Reinforced Concrete Roof Trusses for Industrial Buildings Manufactured by the Method of Vibro-stamping

out by simple methods. Cracks appearing in the top flange of the truss, when the tensioning of the reinforcement ceases, are not detrimental to the load-bearing capacity of the truss. Tests also showed that it is possible to omit tensioning in the top flange. Investigations showed that trusses of 24 m span proved successful and economical when horizontally cast and when vibro-stamping is applied, in comparison with the old method of vertical casting. The vibro-stamping installation allows mechanisation of consolidation of the concrete mix; it is simple in construction and could be made in local factories. Laboratories of the NIIZhB Asia SSSR working on pre-cast pre-stressed reinforced concrete constructions and the theory of reinforced concrete and reinforcement developed and tested in 1956-1957 a method of vibro-stamping of pre-stressed reinforced concrete roof trusses in horizontal position. Two trusses of 24 m span were tested to breaking point; one was reinforced with low-alloy steel batch reinforcement of non-periodical profile Mark 3OKhG2S and the other reinforced by high-tensile reinforcement of standard

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Pre-cast Pre-stressed Reinforced Concrete Roof Trusses for Industrial Buildings Manufactured by the Method of Vibro-stamping

profile (Figure 1). The trusses were calculated for a load of 380 kg/m^2 , with rafters placed 6 m apart. Structural Engineers A. Al'tshuler and Ye. Spektor collaborated in constructing the prototype of the truss. The section of the truss is in the shape of an "I", is 2 000 mm high in the middle, tapering down to 1 000 mm at the end (1:12). The width of the top flange is 450 mm. The bottom flange is 120 x 220 mm in cross-section with the top splayed. The truss was designed in two halves reinforced by pre-stressed batch reinforcement and joining of the two halves of the truss is made by welding together two steel plates, 25 mm thick. The reinforcement of the web and the top flange is of steel Mark 25G2S. The reinforcement of the bottom flange consists of four rods each 28 mm in diameter, stressed to $6 500 \text{ kg/cm}^2$ (the limit of strength of the steel is $10 000 \text{ kg/cm}^2$). Figure 2 illustrates positions of the reinforcement of trusses. Figure 3: the tensioning of the reinforcement and - Figure 4: completed reinforcement of the truss using rod reinforcement. Table 1 gives values for various materials

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Pre-cast Pre-stressed Reinforced Concrete Roof Trusses for
Industrial Buildings Manufactured by the Method of Vibro-stamping

used in trusses of different makes, e.g. Promstroyproyekt, Giprotis and GPI-1. Figure 5 illustrates anchor fastening of reinforcement type "Promstal'konstruktsiya". Figure 6 shows vibrating lids, 6 m long, with 6-7 vibrators I-117. The finished truss, ready for testing, is illustrated in Figure 7. Details of the welded joint is given in Figure 8. Figure 9: distribution of cracks in the truss reinforced with batch reinforcement under the load immediately prior to collapse and Figure 10 illustrates the same, but with alternative rod reinforcement. The deflection of trusses in the middle of the span is shown in the graph (Figure 11). Results of tests carried out are given in Table 2. There are 11 figures and 2 tables.

Card 4/4

BERDICHEVSKIY, G.I., kand.tekhn.nauk; MIKHAYLOV, K.V., kand.tekhn.nauk;
YAKUSHIN, V.A., inzh.

Study of prestressed reinforced concrete beams manufactured
horizontally for roofs of industrial buildings. Trudy NIIZHB
no.24:5-60 '61. (MIRA 15:5)
(Beams and girders) (Roofing, Concrete)

YAKUSHIN, V.A., starshiy inzh.-leytenant

Joining-up of synchronous marine generators to parallel operation.
Mor. sbar. 48 no.10:7C-72 0 '65. (MTRA 18:9)

YAKUSHIN, V.A., inzh.; SHINDEROV, F.N., inzh.

Losses of tension in the bending of rod reinforcement on long-line
stretching beds. Bet. 1 zhel.-bet. 8 no.2:62-65 F '62.
(MIRA 16:5)
(Concrete reinforcement)

MATVEYEV, V.I.; YAKUSHIN, V.I.

Sarcoma of the small intestine. Khirurgiia 41 no.4:74-78 Ap '65.
(MIRA 18:5)

1. I kafedra khirurgii (zav. - prof. B.S. Rozanov) TSentral'nogo
instituta usovershenstvovaniya vrachey na baze Bol'nitsy imeni
Botkina, Moskva.

Yakovlev V. I.

1/28

study of steel redification by means of radioactive
indicators: L. M. Chernov, M. I. Bud'kin, V. I. Yezhov
A. O. Alimov and G. M. Skrebtov, Slon 13, 1968-8

Diagram was obtained from the

AUTHORS: Yefimov, L.M., Litvinenko, D.A., Candidates of Technical Sciences, Barziy, V.K., Marinov, A.I. and Yakushin, V.I., Engineers

TITLE: The Production of Semi-killed Steel (Proizvodstvo poluspokoynoy stali)

PERIODICAL: Stal', 1958, Nr 10, pp 885 - 890 (USSR)

ABSTRACT: An investigation of optimum deoxidation conditions for the production of semi-killed steel is described. Experimental heats were carried out when smelting O8ps and MSt3ps steels. Smelting technology was the same as for the production of corresponding rimming steels. Heats were carried out on 185-ton open-hearth furnaces with magnesite-chromite roofs, with supply of oxygen to the bath. The proportion of hot metal - 65%. Smelting conditions are described in some detail. The composition of experimental heats and teeming conditions are given in Table 1. A comparison of chemical non-uniformity of hot rolled strip from rimming and corresponding semi-killed steel is given in Table 2. It was found that semi-killed steel obtained by deoxidation of rimming steel in ingot moulds, corresponds as to microstructure and mechanical

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The Production of Semi-killed Steel

SOV/133-58-10-8/31

properties of hot and cold rolled sheets to the requirement of standards for respective rimming steel; as to chemical uniformity and drawing properties it is noticeably superior to rimming steel, approaching the corresponding properties of killed steel. An addition of 350-400 g/t (for 0.8ps) and 150-200 g/t (for MSt3ps) of aluminium during top teeming at the end of filling of the moulds leads to an increase in the yield of metal on the slabbing mill to 90%. A further large-scale check of the results obtained is recommended. There are 2 tables.

ASSOCIATIONS: TsNIChM and "Zaporozhstal'" Works.

Card 2/2

YAKUSHIN, V. I.

SOV/133-58-10-22/31

AUTHORS: Litvinenko, D.A. Candidate of Technical Sciences and
Marinov, A.I., Barziy, V.K. and Yakushin, V.I., Engineers

TITLE: The Production and Properties of Aluminium-Killed Non-
ageing Sheet Steel (Proizvodstvo i svoystva uspokoyennoy
alyuminiyem nestareyushchey listovoy stali)

PERIODICAL: Stal', 1958, ⁸Nr 10, pp 931-938 (USSR)

ABSTRACT: The development of the technology of production of killed non-ageing steel containing aluminium and suitable for the manufacture of cold-rolled sheets which, in addition to high drawing properties and non-sensitivity to slip lines, possessed good surface when rolled from non-dressed slabs. Two deoxidation methods of low-carbon 08kp VGV steel were tested: 1) with aluminium shot in top-poured moulds and 2) with aluminium in the ladle and subsequent bottom-pouring of ingots. The quality of the experimental metal was tested during all manufacturing stages, including stamping of motor-car bodies. It was established that in order to produce motor-car bodies without defects due to slip lines, by stamping, it is advantageous to use cold-rolled sheets of low-carbon steel in which the process of mechanical ageing is localised by stabilising additions

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SOV/133-58-10-22/31

The Production and Properties of Aluminium-Killed Non-Ageing Sheet Steel

of vanadium or aluminium. From economic considerations, aluminium is more advantageous. Introduction into low-carbon rimming steel 08kp VGV of aluminium in an amount sufficient to obtain not less than 0.02% of residual aluminium sharply increases the stability of steel against mechanical ageing. Work hardening and a decrease in plastic properties as well as the appearance of the yield stage on the tensile curve of such steel is observed only after an artificial ageing at 200 °C for one hour. On deoxidation of the metal with aluminium shot in moulds, when the level of the metal is about 150 - 200 mm below the filling level, the quality of the surface of cold-rolled sheets is higher than from killed steel deoxidised with aluminium in the ladle and bottom-poured. Moreover, for the deoxidation in moulds about 50% less aluminium is required than for deoxidation in the ladle. Shrinkage defects in ingots of killed steel top-poured into moulds (wide and down) without tops, are completely welded during cold rolling. Therefore, sheets made from the upper third of ingots are not inferior in quality from those made from the bottom half of the ingots. For the above reason, the

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The Production and Properties of Aluminium-Killed Non-Ageing Sheet Steel

yield of slabs from such ingots should be about 90% which is higher than from rimming steel ingots. Large ingots (9-18 ton) of aluminium-killed steel are more uniform in chemical composition and mechanical properties in comparison with rimming steel ingots. The above permits improving the technology of low-carbon steel for hot and cold-rolled sheets VGV by: a) increasing the weight of ingots to 18 tons and above; b) increasing the range of permissible sulphur content to 0.03% instead of 0.025%; c) economising ferromanganese and d) rolling VGV sheets from the head part of the ingots. With regard to microstructure, sheets of killed steel differ from sheets of 08kp VGV steel mainly in the tendency to form finer grains and fine, structurally free cementite, as well as non-equilibrium grains, elongated in the direction of rolling. Non-metallic inclusions of the killed steel consist mainly of uniformly distributed aluminates, the amount of which is

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The Production and Properties of Aluminium-Killed Non-Ageing Sheet Steel

higher when aluminium is introduced in moulds than when it is introduced in the ladle.

There are 1 figure, 5 tables and 3 Soviet references.

ASSOCIATIONS: TsNIICHM and zavod "Zaporozhstal'" ("Zaporozhstal' Works)

Card 4/4

YEfimov, L.M.; YAKUSHIN, V.I.; Primali uchastiye: BUL'SKIY, M.T., inzh.;
ALIMOV, A.G., inzh.; SKREBTSOV, A.M., inzh.

Arsenic distribution in rimmed steel ingots. Izv.vys.ucheb.zav.;
chern.met. 4 no.5:68-74 '61. (MIRA 14:6)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii.

(Steel ingots) (Arsenic)

LITVINENKO, D.A., kand.tekhn.nauk; YAKUSHIN, V.I., inzh.

Killed, low-carbon, nonaging steel with rimmed crust for cold-rolled sheet. Stal' 21 no.8:735-741 Ag '61. (MIRA 14:9)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii.
(Steel ingots)

LITVINENKO, D.A.; YAKUSHIN, V.I.

Pouring of killed low-carbon steel in ingot molds without
riser head. Stal' 22 no.9:791-794 S '62. (MIRA 15:11)
(Steel ingots)

S/193/63/000/001/001/008
A004/A101

AUTHORS: Yefimov, L. M., Candidate of Technical Sciences, Litvinenko, D. A.,
Candidate of Technical Sciences, Yakushin, V. I.

TITLE: Production and prospects of using steels with incomplete reduction

PERIODICAL: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 1, 1963, 3 - 8

TEXT: This article offers a survey on the production and use of steels with incomplete reduction, such as semi-killed and capped steels. The authors point out that this kind of steel is widely used in the USA and Britain and that many plants in France, Belgium and Japan are producing steels with incomplete reduction which are particularly used in the automobile industry. It is emphasized that, with a production figure of some 2.5 mill. tons for the first half-year of 1962, the production of this steel type in the USSR is hitherto insufficient. The major amount of semi-killed steel produced in the USSR comprises the grades Ct.5 (St. 5), M45 and ECT .6 (RSt. 6), used mostly for sections employed in mining. The authors present a detailed description of the technological processes of producing steel with incomplete reduction, and tables showing the percentage of serviceable pro-

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